

2006

Technical communicator's encroachment on public relations: a report from the field

Krysta JoEllen Nibe
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/rtd>



Part of the [English Language and Literature Commons](#), and the [Rhetoric and Composition Commons](#)

Recommended Citation

Nibe, Krysta JoEllen, "Technical communicator's encroachment on public relations: a report from the field" (2006). *Retrospective Theses and Dissertations*. 16171.
<https://lib.dr.iastate.edu/rtd/16171>

This Thesis is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Technical communicators' encroachment on public relations:

A report from the field

by

Krysta JoEllen Nibe

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Rhetoric, Composition, and Professional Communication

Program of Study Committee:
Lee Honeycutt, Major Professor
David Roberts
Viviana Cortes

Iowa State University

Ames, Iowa

2006

Copyright © Krysta JoEllen Nibe, 2006. All rights reserved.

Graduate College
Iowa State University

This is to certify that the master's thesis of

Krysta JoEllen Nibe

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy

TABLE OF CONTENTS

ABSTRACT	iv
CHAPTER 1. INTRODUCTION & STATEMENT OF PROBLEM	1
CHAPTER 2. LITERATURE REVIEW & THEORETICAL FRAMEWORK	4
The Histories of Public Relations & Technical Communication	4
Public Relations & Technical Communication Today	7
Theoretical Framework: Encroachment	11
Research Questions.....	15
CHAPTER 3. METHODOLOGY	18
Survey Details.....	19
Demographic / Career Information.....	19
Public Relations Roles Information.....	19
Expert Prescriber Questions	20
Problem-Solving Process Facilitator Questions	20
Communication Facilitator Questions.....	21
Communication Technician Questions.....	22
Extra Questions.....	22
CHAPTER 4. DATA ANALYSIS	23
Participants	23
Technical Communicators' Role Perception.....	24
Experience Effects on Encroachment.....	28
Gender Effects on Encroachment	29
Education Effects on Encroachment.....	29
CHAPTER 5. CONCLUSIONS	30
Implications for Education	32
Limitations.....	34
Further Research & Phenomena	35
WORKS CITED	38

ABSTRACT

A survey was conducted to focus on technical communicators and their roles within organizations. The study utilized public relations encroachment theory and survey research to investigate five research questions relating to technical communication encroachment of public relations. The research found that there may be some encroachment occurring in public relations by technical communicators, but only in two roles: *Problem-Solving Process Facilitator* and *Communication Facilitator*. Additionally, the study found that a technical communicator's experience level was linked to encroachment. Less experienced technical communicators were more likely to perceive they encroach on public relations. Gender and education did not play a role in encroachment. Ultimately, the study and findings can be examined further to determine if curricular changes should be made in technical communication programs and also to better define the professional field of technical communication.

CHAPTER 1. INTRODUCTION & STATEMENT OF PROBLEM

In the past 40 years, technical communicators have evolved to meet the changing needs of organizations and to succeed in the current business climate. Today, they are faced with new problems and issues that reach far beyond the documentation challenges of the past. Rapidly changing technology and increased expectations within organizations have predicated the need for additional skills in order for technical communicators to be successful.

A survey of job postings listed on the Web site Monster.com indicates that companies are now seeking technical communicators who are not only adept at writing, but who also have a toolbox of skills to enhance organizational productivity. On the technical side, this set of skills often includes knowledge of HTML, XML, RoboHelp, and other highly technical skills. Additionally, many organizations are looking for technical communicators with collaboration and project management skills.

One particular technical writing job at Prime Technology, LLC, was described as follows:

The job entails writing or rewriting a variety of manuals, advertising brochures and, most importantly, website text. The individual will not directly edit the website but will be asked to add the text and correct/edit existing text in support of the company website (Job Description: Technical Writer).

Aside from new skills requirements, shrinking budgets have forced organizations to look for people adept at public relations, advertising, and Web site development. "Because so many organizations are downsizing these days, a good deal of attention has focused on the need to streamline processes to make them more efficient so that organizations can operate and compete more effectively" (Grice, 1996, p. 215). Indeed, Whiteside (2003) observes that

“the role of the technical communicator is moving to one involving a number of interdisciplinary areas, including grant writing, usability, educational technology, user interface design, multimedia design, and knowledge management” (p. 304).

Troester and Warburton (2001) note that public relations skills are perhaps the most sought after skills a technical communicator can have. The researchers report that technical communicators also serve as corporate spokespeople, noting that “many companies report turning to content specialists ... to handle public communication and thus assume at least partial, yet critical, responsibility for the public relations function of the organization” (p. 242).

The move that organizations are making to hire technical writers for positions within public relations, including management, has been labeled “encroachment” in the public relations literature. “Encroachment,” as defined by Lauzen (1991), occurs when non-public relations practitioners hold management positions within the public relations department of an organization. Additional researchers (Kelly, 1993; Lee, et. al, 2000) have reported that encroachment actually occurs on three levels: managerial, structural, and functional. Each level affects not only the public relations practitioners and departments within the organization, but also those employees who are being hired to complete public relations work.

That said, if technical communicators are expected to take part in public relations activities, it is critical that they need to understand more about the public relations field and the relationship between organizations and the public they serve. Such skills may call for a change in the current technical communication curriculum. Most technical communication

programs within universities have yet to require any form of public relations or public communication education.

While there is extensive data regarding new technical communication tasks, there is a lack of research that examines public relations roles within the technical communication job expectations. Additionally, despite numerous studies of encroachment, no current research addresses the issue of technical communicators encroaching on public relations.

The purpose of this study is to determine what level of encroachment on public relations by technical communicators is perceived as occurring within organizations. The extent of encroachment may then provide an empirical basis for including public relations in technical communication curriculum. The survey conducted as part of this study will provide benchmark data about what public relations roles current technical communicators in Des Moines, Iowa, perceive they are performing in their careers.

CHAPTER 2. LITERATURE REVIEW & THEORETICAL FRAMEWORK

The fields of public relations and technical communication both have extensive histories that stem back over 100 years. While both fields arose from the communication needs of particular organizations, they are often considered very diverse fields of study and practice. However, today the fields are beginning to blur as technical communicators are moving toward playing public relations roles within organizations.

The Histories of Public Relations & Technical Communication

Public relations, according to Cutlip and Center (1952), began when large corporations witnessed the public's dissension toward large businesses and monopolies. Major corporations were lying and omitting crucial information to the public which led the public to be uninformed. Gradually, the public began to demand information. It was these demands that led to the creation of the Publicity Bureau, an organization of journalists hired to serve as publicity agents for large corporations.

For example, AT&T struggled with image and public trust issues in the early 1900s. To combat those issues, the company employed some of these publicity agents, giving birth of public relations. As AT&T began to utilize the bureau for public relations tasks, other major corporations took notice and started recruiting trained journalists to serve as public relations professionals. While these men were trained in communication and newspapers, they lacked crucial training in conflict communication (Cutlip & Center, 1952).

Also, in the early 1900s, a journalist named Ivey Lee realized the potential for public relations and quit his job to serve as a publicity agent. After working with various clients, Lee became disgruntled with public relations and saw that "the business policies of secrecy

and silence were failing” (Cutlip & Center, 1952, p. 75). He left public relations and began consulting with organizations about correcting their policies and printing information that was favorable and well-received by the public.

According to Grunig (2000), Lee’s ideas eventually spawned the concept of symmetrical communication whereby “public relations must interpret the public to management as well as management to the public” (p. 35). Others, including Arthur Page, the first corporate vice president of public relations in the United States, began encouraging organizations to use a two-way model of public relations rather than the more traditional informative model of one-way communication.

As early practitioners evolved into interpreters for the public and experts in two-way communication, they also began to take on new roles as marketers and salespeople. One such example is Edward Bernays who “fathered the link between corporate sales campaigns and popular social causes” (Ewan, 1996, p. 3) by giving women’s rights protestors Lucky Strike cigarettes to hold up during protests. At that time Bernays defined a public relations practitioner’s role in an organization as “fashioning and projecting credible renditions of *reality* itself” (p. 6). Through the early to mid 1900s, the field of public relations was still found only in major large organizations, most firms began to realize the need for similar communication strategies, and the field began to grow rapidly (Cutlip & Center, 1952).

Even in the beginning, the field of public relations borrowed information and strategies from a variety of other disciplines. Bernays believes that public relations practitioners must understand the fields of “sociology, psychology, social psychology, and economics” (Ewan, 1996, p. 10).

Though technical communication began 50 years before the field of public relations was born, it did not recognize the need for multidisciplinary study until the 1990s. Yet, like the field of public relations, technical communication programs in universities determined that “diverse areas as rhetoric, gender and composition studies, cognitive psychology, sociology, and ethics” all had their place in educating technical communicators (Staples, 1999, p. 160). In fact, as Staples notes, “to insist on an isolated disciplinary stance may cost technical communication education its potential” (p. 161).

This late recognition of multidisciplinary focus stems in part from the fact that technical communication began as an isolated academic field in response to the requests of senior engineers and corporate managers who were concerned that engineers were graduating without adequate skills in writing and reading. As a result, service courses in technical communication were born (Kynell, 1999). These service courses were taught as part of the engineering curriculum and were located in that academic department. Originally, technical communicators within organizations simply wrote manuals, instructions, and scientific or engineering findings. They often were seen as interpreters between the technical staff and the audience (Staples, 1999). The field of public relations, on the other hand, was born within organizations and relied upon professionals formally trained in journalism.

Technical communication enjoyed growth again in the 1960s as technology continued to evolve and the need for manuals and other technical documents increased. Universities followed in this regard and began teaching their technical communication students what the industry was asking for. “[T]he 1960s meant a closer and more productive relationship between industry and the academy than in previous decades as the technical communication profession became better recognized and more clearly defined” (Staples, 1999, p. 156).

In 1970 a technical communicator could be described in the following manner.

He wrote manuals and other materials which supported a military, manufacturing, or domestic product industry. Such a writer might have some college education....He would compose with a yellow pad and pencil or an electric typewriter. The audience for his work would consist of American readers of English....An ancillary to industry, he was easily expendable in hard times (Staples, 1999, p. 156).

The definition of a technical writer took another turn in the 1980s. Graduate programs in technical communication began to emerge and the field was thriving both in academia and in organizations. Miller (1989) emphasized the need at this point for technical communication programs to collaborate with industry to further students' education. She also asserted that academia need not follow strictly what industry is doing, but rather look for better practices in technical communication.

In the late 1990s, the field of technical communication began to earn the respect of organizations as a vital communications department. In academia, the field moved from within the confines of the engineering department to form its own department or program. During this time, Staples (1990) reports that "the technical communicator's contribution to a product is integral to the product's worth and value" (p. 160). Additionally, she argues that specialized roles for the technical communicator emerged during the late 1990s and helped further the field of practice and study. Academia was not far behind industry in realizing that specializations for technical communicators would be beneficial.

Public Relations & Technical Communication Today

Until the past ten years, public relations and technical communication have been seen as very specific types of organizational or corporate communication. However, today,

researchers (Jones, 1995; Grice, 1996) are finding that boundaries between the two professions are beginning to blur.

Public relations today, according to Hutton (1999), can be defined by using the terms “management, organization, and publics” (p. 201). Gibson (1991) states the simplest description of public relations. He asserts that “communication lies at the heart of public relations practice” (p. 176). Further, he reminds us that “public relations practitioners serve two masters, management and the public” (p. 179). Grunig (2000) argues that “public relations professionals...serve as the advocates of organizations, helping them to further their interests in the marketplace of ideas and in government” (p. 38).

Continuing with a description of the role of a public relations professional, Grunig (2000) reports from the field that “public relations professionals, by definition, believe their role is to balance the interests of their clients with the interests of the publics that constitute society” (p. 27). However, unlike the original practitioner, in Grunig’s definition, it is easy to see that the field of public relations has made a permanent shift toward considering the public’s needs and expectations when presenting information.

As with many professions, practitioners and researchers alike desire to know what constitutes effective and excellent practice in their particular area. Greiling (2001) reports that “good public relations follows corporate objectives, and it expresses key marketing messages and a coherent corporate image” (p. 26). In this definition, the public is not mentioned; however, a coherent message is evaluated by the level of public understanding.

When writing for the public, practitioners must often be persuasive. In fact, Sides (1992) argues that “the goal of public relations writing is control—control of the media (radio, television, and print) and as a result, control of public opinion” (p. 12).

Quite likely, the persuasive nature of public relations causes the public to often regard the field in a negative light. Grunig (2000) states “most people seem to view public relations as a mysterious hidden persuader working for the rich and powerful to deceive and take advantage of less powerful” (p. 23). However, the negativity toward public relations does not stem solely from the public. Bernays believes the title of public relations professional has been misused as of late and that people are using the term *public relations* to define getting “pieces into the paper that are favorable to a client” (Ewan, 1996, p. 11).

Despite the negativity that often surrounds the idea of public relations, “most scholars and professionals believe that the field plays an essential role in a democratic society” (Grunig, 2000, p. 24). In fact, Bernays believes the field of public relations serves as a “requirement...to shape attitudes of the general population” (Ewan, 1996, p. 11).

Technical communication today is often defined using terms and descriptions very similar to those used when defining public relations. For instance, in 2001, Burnett defined technical communicators as “highly trained specialists whose primary responsibility is to design, develop, and produce a wide range of documents and visuals” (p. 18). She goes on to define technical communication as “a cluster of characteristics dealing with factors such as content, context, purpose, audience, organization, visuals, and design” (p. 3). Many of these factors are present within public relations as well.

In their study of technical communicators in San Diego, Little and McLaren (1987) found that survey respondents defined the field as an “immensely challenging and varied occupation” and reported a need for a wide range of abilities (p. 21). One respondent said, “The technical writer must be an analyst, a writer, a typesetter, editor, proofreader, artist, salesperson, psychologist, stoic...” (p. 22). Given more recent research (Grice, 1996;

Troester & Warburton, 2001), it is reasonable to add *public relations specialist* or *spokesperson* to the expanding list of talents a technical writer might possess.

The advent of digital communication technologies has expanded this list of talents even further. Jones (1995) asserts that “new technologies are blurring the divisions between the professions in ways not possible just a few years ago” (p. 568). Advancements in communication media have also changed the landscape of a technical communicator’s job. Zachry et al. (2001) observes that “with the blending of information types that people are now experiencing on the Internet, the stakes will be raised for all information producers and designers as commercial websites lead the way in defining excellence for user-focused, web-based publications” (p. 251). In short, technical communicators are being prompted by the Internet revolution to produce better information for an online-savvy society.

This online society is an audience for which technical communicators have not previously written. “Advances in computer technology more accurately justify the prediction that technical communicators must be able to work in a constantly changing environment where advancing technology will radically change many of their professional roles” (Little, 1990, p. 30). These advances in technology, especially the growth of the Internet, have taken documents that previously were developed for a specific audience to the general public, requiring technical communicators to thoroughly evaluate for whom they are writing.

In addition to understanding and utilizing new technology, technical communicators must have many additional skills. Sides (1992) believes that technical communicators must learn marketing, advertising, and public relations skills to ensure job security. While he believes that technical communicators can shift some of their current knowledge to perform new roles, he argues they must learn the new skills. He also states technical communicators

are poised to apply their current skills to new and varied tasks for high tech firms. “We have considerable experience bringing together diverse kinds of information to meet a reader’s needs” (p. 5).

One of the new challenges technical communicators face is public communication. In her 2004 article regarding public intellectuals, Bowdon, asserts that technical communicators, with their specialized skills in technical areas, are best able to act as public intellectuals and contribute to the public’s understanding of complex issues. However, in order to successfully do this, Bowden suggests that technical communicators must “recognize and embrace the deeply rhetorical nature” of technical communication (p. 326).

The fields of public relations and technical communication have evolved since their inception. In fact, the field of technical communication has grown and expanded to the point where technical communicators today are beginning to assume more public relations duties in their jobs. This expansion has caused the boundary between technical communication and public relations to fade. This study, based on encroachment theory, will focus on the likelihood that technical communicators are indeed playing public relations roles.

Theoretical Framework: Encroachment

We are beginning to see overlap between the fields of public relations and technical communication in ways that organizations and communication professionals have not previously witnessed. The boundary between the fields is beginning to fade for numerous reasons such as specializations, technological advances, and understanding of complex public issues. Due to the new requirements and expectations of a technical communication position, practitioners are more likely to encroach upon the traditional communication roles of public relations specialists.

Researchers in the late 1980s, such as Buchholz (1989), were reporting that many of the communication professions, including public relations and technical communication, were encroaching on one another, or in simpler terms, merging or collaborating to create an extensive communications role. He found that technical communicators “incorporate almost the entire spectrum of written products, from technical number-crunching reports to more creative product releases and newsletters” (p. 15). Public relations practitioners, on the other hand, are incorporating such fields as “marketing, advertising, sales, and technical communication” (p. 19).

Shortly after, Lauzen (1991) defined encroachment as the occurrence of non-public relations professionals taking over positions within public relations departments. Originally, her theory of encroachment was developed to examine the management role in public relations which has been found to be occupied by professionals who are not formally trained in public relations. Since that time, a reasonable body of research has been presented about the encroachment of public relations by law and fund-raising professionals (e.g. Lee, Jares, & Heath, 1999; Kelly, 1993; Kelly, 1994; Lauzen, 1992; Lauzen & Dozier, 1992). In each of those studies, researchers found in special situations that public relations as a field is being dominated by professionals not trained in public relations.

Lauzen’s theory of encroachment relies heavily on public relations role theory. This theory, developed by Broom and Dozier (1986), defines four different roles that public relations practitioners hold within an organization. *Expert prescribers* are considered to be well-informed practitioners who make the decisions regarding public relations programs including diagnosing problems and prescribing solutions for the problems. This role is largely a management role. *Communication facilitators*, as defined by Ekachai (1995), are

“information mediators between and organization and its audiences” (p. 329). These practitioners lead the exchange of information so that all parties understand each other. *Problem-solving process facilitators* use systematic problem solving processes in order to determine problems and issues that an organization may encounter. Additionally, these practitioners help solve the problems they identify. Finally, *communication technicians* are practitioners who utilize technical skills such as writing, designing graphics, taking photographs, and performing other tasks in order to sustain a public relations program.

Through subsequent research, it was determined that there are possibly only two roles that public relations practitioners have: managers and technicians. Expert prescribers, communication facilitators, and the problem-solving process facilitators can be considered to be managers. It is this distinction that leads into further discussions of how encroachment occurs. In Lauzen’s (1991) article, she found that a manager position or role within an organization is considered to have power, while a technician role is essentially powerless. When a public relations practitioner is in a power (or managerial) role within an organization, encroachment is less likely to occur. Similarly, if a practitioner has the education and drive to hold a managerial role within the department, encroachment is less likely to occur.

However, it has been discovered that when practitioners and upper management view public relations as a technician-oriented department, encroachment from other departments occur. This type of encroachment was the primary focus of many studies and is labeled *authority encroachment*.

Additional segments of encroachment have been found to occur within organizations. Lee, Jares, and Heath (2000) report that structural and functional encroachment also occur within public relations departments and threaten the very livelihood of the department.

Structural encroachment is when the public relations unit of an organization is buried within other segments of the organization such as media relations, technical communication, or public affairs. This occurs when an organization views the public relations department as expendable. Additionally, when structural encroachment occurs, according to Kelly (1993), functional encroachment also is likely to occur. Simply stated, when a public relations department is located within another department such as technical communication, those communicators are more likely to public relations roles.

Functional encroachment, defined and studied by Kelly (1993), is when other departments within an organization take over some of the operations of the public relations department. This has been studied within fundraising organizations as well as in crisis situations. It was discovered that lawyers are likely to take over public relations duties, or functionally encroach on public relations, during crisis situations. In many ways, technical communicators are practicing functional encroachment when they are called upon to communicate with the public in a manner that is historically bound to the public relations unit within an organization.

To summarize, public relations and technical communications are two fields that appear to be losing their strict boundaries in terms of roles and job tasks. Therefore, it is likely that technical communicators are encroaching upon public relations, most likely in functional areas according to current research.

Research Questions

To determine the level of technical communication encroachment on public relations, this research project has been developed to answer five specific questions. The first research question will be explored through data analysis to determine if overall encroachment is occurring. Overall encroachment, for the purpose of this study, can be defined as encroachment in each of the four roles defined earlier. This will prove or disprove theories in technical communication research (Zachry, et. al, 2001; Whiteside, 2003; Troester & Warburton, 2001) that state technical communicators are being required to complete work outside of their traditional roles. If indeed technical communicators perceive they are performing duties and roles of public relations practitioners, it can likely be assumed that technical communicators are, to a certain extent, encroaching on public relations. Therefore the first research question is:

RQ1: To what extent do technical communicators perceive they are performing duties and taking on roles that public relations practitioners have traditionally held?

To follow up that question, the second research question focuses on which of the four roles technical communicators perceive they are fulfilling within their organization. If encroachment is occurring, it may be only within one or two of the specific roles. Studies, such as the one conducted by Buchholz (1989), revealed that technical communicators may be encroaching on public relations as *Communication Technicians*. With advances in technology and education, technical communicators may now be performing additional roles. Therefore, research question two is as follows:

RQ2: Which of the four roles identified by Broom and Dozier (1986) are technical communicators likely to perceive they play within their organizations?

The research that truly highlights potential technical communication encroachment of public relations (Zachry, et. al, 2001; Whiteside, 2003; Troester & Warburton, 2001) is relatively recent. Therefore, this encroachment may be a new phenomenon led by younger and less experienced technical communicators. Recent college graduates may feel this pressure to take on these new roles as they have been recently trained in communication and may be more flexible to add new and different tasks to their role. To determine if these assumptions are correct, research question three is:

RQ3: What impact does a technical communicator's years on the job have on perceived encroachment of public relations?

According to the Public Relations Society of America (Careers in Public Relations), over half of the 98,000 public relations specialists in the United States are women. This may mean that women are better able to perform public relations tasks, or simply are more interested in that type of communication. Assuming that, there may be a significant difference in the number of female technical communicators who perceive they take on public relations roles than male. To determine if this is occurring, research question four asks:

RQ4: Are men or women more likely to perceive they take on public relations roles in their technical communication career?

The final research question posed in this study focuses on the training that technical communicators have when entering the workplace. Technical communication programs exist from the Associate degree level through to the Ph.D. level. As the education level increases, it can be assumed that technical communicators are gaining more knowledge about communication strategies and technology. Therefore, a technical communicator's degree

may determine the level of encroachment that technical communicator has on public relations. To examine that, research question five is:

RQ5: What impact does a technical communicator's degree have on his/her propensity to encroach on public relations?

The five research questions developed for this study will provide a view of the technical communication workplace and potential encroachment on the field of public relations. In summary, the research questions being examined are:

RQ1: To what extent do technical communicators perceive they are performing duties and taking on roles that public relations practitioners have traditionally held?

RQ2: Which of the four roles identified by Broom and Dozier (1986) are technical communicators likely to perceive they play within their organizations?

RQ3: What impact does a technical communicator's years on the job have on perceived encroachment of public relations?

RQ4: Are men or women more likely to perceive they take on public relations roles in their technical communication career?

RQ5: What impact does a technical communicator's degree have on his/her propensity to encroach on public relations?

CHAPTER 3. METHODOLOGY

The purpose of this study is to examine the public relations roles that technical communicators perceive they are practicing in their current positions. Therefore, I surveyed technical communicators who are in the professional field and in organizations where it may be likely they are asked to complete public relations tasks. The multi-dimensional survey is derived from work done by Broom (1979, 1982, 1993). It uses Broom's original 24 questions, divided into four roles, plus an additional four questions added to gain more information about tasks which technical communicators may be faced with today. The role measures presented in the original 24-question survey has been tested numerous times using factor analysis (Ekachai, 1995).

The surveyed group of technical communicators was drawn from the membership list of the Des Moines Chapter of the Society for Technical Communicators (STC). The group has 66 members and all were given the option to complete the survey. This group was chosen as the members are either fully-employed as technical communicators or have been in recent years. They are working in the profession and presumably graduated with training in technical communication.

The survey was designed in an open source online database system, PHP Surveyor, and hosted on the eServer survey site maintained at Iowa State University. Through the online system, the survey was emailed to the 66 members initially on December 13, 2005. A reminder email was sent on January 10, 2006, to members who had not yet completed the survey. One week later, on January 17, the survey was closed and data collected from the database.

Survey Details

As stated previously, the survey used is based upon Broom's (1979, 1982, 1993) research on practitioner roles. There were two distinct sections of the survey: demographic / career information and public relations roles information. Survey participants were required to answer all questions in order to successfully complete and submit their responses.

Demographic / Career Information

This section of the survey consisted of nine questions. Questions included gender, age, ethnicity, current professional title, years spent working in technical communication, and degree status and major. Additionally, this section surveyed participants about their organization and whether they worked in a technical communication department and if the organization they work for has separate technical communication and public relations departments. The questions regarding professional title and degree major were open-ended questions, while the rest required participants to select the best answer.

The questions in this section of the survey allowed for comparisons to be made among respondents in terms of Research Questions 3, 4, and 5.

Public Relations Roles Information

The second, and final, section of the survey presented can be easily divided into four separate sets of questions which correspond to the public relations roles discussed earlier: Expert Prescribers, Communication Facilitators, Problem-Solving Process Facilitators, and Communication Technicians. A fifth set of questions was included to further expand on the tasks that technical communicators are performing in organizations. The 28 questions were presented and responses fell in a five-point Likert scale ranging from strongly disagree (1) to

strongly agree (5) with a neutral point (3) in the middle. The questions asked in Section Two were used to determine answers for Research Questions 1 and 2.

In the following subsections, role encroachment scores are given for each role. These scores are later used to indicate the level of encroachment for each particular role.

Expert Prescriber Questions

Six questions were asked to determine the extent to which technical communicators perceive they are playing the role of Expert Prescriber in their organization. A total role encroachment score of 30 indicates a technical communicator perceives he/she makes decisions, diagnoses problems, and prescribes solutions regarding public relations programs.

Table 1: Expert Prescriber questions with original survey numbers

10. I make the communication policy decisions.
12. I take responsibility for the success or failure of my organization's public relations program.
18. I plan and recommend courses of action for solving and/or avoiding public relations problems.
26. Because of my experience and training, others consider me to be the organization's expert in solving public relations problems.
34. I observe that others in the organizations hold me accountable for the success or failure of public relations programs.
36. I diagnose public relations problems and explain them to others in the organization.

Problem-Solving Process Facilitator Questions

Answers to the following questions determine the extent to which technical communicators view themselves as playing the role of a Problem-Solving Process Facilitator within an organization. These six questions are aimed at defining the technical communicator's perceived level of problem identification and problem solving activities. A role encroachment score of 30 on this section indicates a technical communicator's complete immersion in these activities.

Table 2: Problem-Solving Process Facilitator questions with original survey numbers

16.	I represent the organization at professional events and meetings.
17.	I report public opinion survey results to keep management informed of the opinion of various publics.
21.	I keep management informed of public reactions to organizational policies, procedures, and/or actions.
24.	I create opportunities for management to hear the views of various internal and external publics.
28.	I conduct communication audits to identify communication problems between the organization and various publics.
29.	I keep others in the organization informed of what the media report about our organization and important issues.

Communication Facilitator Questions

Participants were asked the following six questions about their perceived roles as Communication Facilitators. If a technical communicator acts as an “information mediator” (Ekachai, 1995, p. 329) within the organization, his/her role encroachment score would be near 30 on this section. Duties that focus on ensuring understanding between organizations and the publics they serve often fall within the Communication Facilitator role.

Table 3: Communication Facilitator questions with original survey numbers

15.	I encourage management participation when making important public relations decisions.
20.	In meeting with management, I point out the need to follow a systematic public relations planning process.
25.	I operate as a catalyst in management’s decision-making.
30.	I keep management actively involved in every phase of the public relations program.
31.	When working with managers on public relations, I outline alternative approaches for solving problems.
33.	I work with managers to increase their skills in solving and/or avoiding public relations problems.

Communication Technician Questions

Technical communicators who serve as Communication Technicians likely scored near 25 on this section. The answers to the following five questions determine the extent to which technical communicators perceive themselves as practitioners who complete the assorted tasks of a public relations communication technician.

Table 4: Communication Technician questions with original survey numbers

11. I handle the technical aspects of public relations materials.
14. I do photography and graphics for public relations materials.
19. I am the person who writes the public relations materials presenting on information on issues important to the organization.
32. I produce brochures, pamphlets, and other publications.
35. I maintain media contacts and place press releases.

Extra Questions

The final four questions of the second section were developed with the intent of discovering more concrete answers to what technical communicators perceive they do. Two of these questions focus on new media tasks that likely did not exist when the survey was first developed. The other two questions focus more on spokesperson activities which was the focus of Troester and Warburton's (2001) article. Answers to these questions shed light on additional tasks technical communicators may be doing.

Table 5: Extra questions with original survey numbers

13. I develop the company's Web site and other new media endeavors.
22. When the media calls about the company's technical products, I am the person responsible for speaking with them.
23. Because of my technical knowledge, I am asked to represent the company at various speaking engagements.
27. I am responsible for writing the information that appears on the company's Web site.

CHAPTER 4. DATA ANALYSIS

Participants

Upon completion of the survey, I analyzed the data using SPSS and SAS analytical software to obtain frequencies, f-values via one-way ANOVA tests, and mean comparisons using t-tests.

Of the 66 invited participants, 32 responded for an overall response rate of 48.5%. Ages of respondents fell in a near-normal distribution between the ages of 22 and 60. No respondents surveyed reported being older than 60. In terms of educational background, a normal distribution of responses revealed that the vast majority of respondents had some higher education. Most (17) reported having a bachelor's degree, while some (10) reported having master's degrees.

Survey responses regarding career experience did not follow a normal distribution. As seen in Table 6 below, respondents tended to skew toward fewer working years in technical communication. This may be due to the survey sample which includes technical communicators who are active in the professional organization. As technical communicators spend more time in the field and gain more experience, they may be moved to supervisory or managerial roles. When this happens, those technical communicators may not be as active in the organization due to time commitments and their new professional roles.

Table 6: Responses regarding years spent working in technical communication field

Years in Field	Respondents
<5	7
6-10	12
11-15	5
16-20	4
>20	4

Technical Communicators' Role Perception

The first two research questions examine technical communicators' perceptions of the public relations roles they play within their organizations. Specifically, RQ1 examines overall encroachment, while RQ2 studies role encroachment. Overall encroachment is the extent to which technical communicators perceive they are performing public relations duties within their organization. It does not take specific roles and duties into account when calculating encroachment scores. Role encroachment, on the other hand, is encroachment that is specific to one or more of the roles defined by Broom and Dozier (1986). When determining both overall and role encroachment scores for survey participants, the extra questions were eliminated and only the original survey questions were included.

For overall encroachment, the lowest possible score could be 20, which means respondents answered "Strongly Disagree" for each statement and do not perceive themselves performing public relations duties within their organizations. A high score of 110 represents a situation where respondents answered "Strongly Agree" for each statement and believe they perform all public relations duties within their organization.

For overall encroachment, respondents' average score was 48.56 and the range of scores was 23 to 96. Scores followed a non-normal distribution which is skewed to the left, indicating low to moderate overall encroachment is perceived as occurring in this situation (see Figure 1).

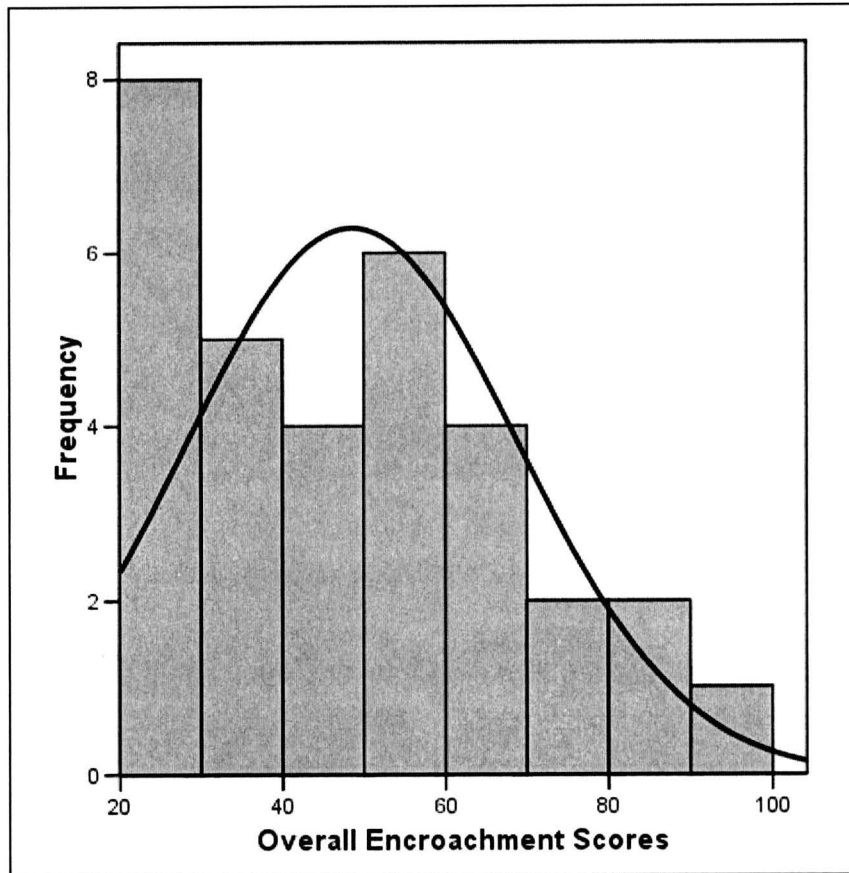


Figure 1: Respondents' perceptions of their involvement in public relations activities

To follow up on findings from RQ1, RQ2 probes into role encroachment. Role encroachment scores are defined as the total score for a particular role. However, the overall scale is not evenly divided among the four roles. One role, Communication Technician, had a role encroachment score which ranged from five (no encroachment) to 25 (high encroachment). The other three roles: Expert Prescribers, Problem-Solving Process Facilitators, and Communication Facilitators, had role encroachment scores of 6 (no encroachment) to 30 (high encroachment).

Therefore, to determine significance for the comparisons of these roles, they had to be compared as similar sets. Due to the unevenness of the roles, the role encroachment average

score for each participant was determined by utilizing the average score for each role. Prior to determining which role technical communicators perceived they played most often, the role encroachment averages were run through a model which indicated that each role was independent of the others. This means that a participant's role encroachment score for one role was not dependent on their role encroachment score for a differing role.

The subsections, including role encroachment averages, are shown in Table 7.

Table 7: Roles, their definitions, and survey averages

Role	Definition	Role Encroachment Average
Expert Prescribers	Make decisions regarding public relations programs including diagnosing problems and prescribing solutions for the problems	2.03
Problem-Solving Process Facilitators	Determines problems and issues that an organization may encounter and helps solve the problems they identify	2.11
Communication Facilitators	Likely to lead the exchange of information so that all parties understand each other	2.26
Communication Technicians	Utilize skills such as writing, designing graphics, taking photographs, and performing other tasks in order to sustain a public relations program	2.02

A one-way ANOVA was conducted using role encroachment averages as the dependent variables and each role as the independent variables. This preliminary test indicated significant differences ($p < 0.0001$) among the roles, which means that technical communicators may be playing one role more frequently than others.

The frequencies of these four roles indicate little to no encroachment. Each role was skewed toward the lower end of the scale; however, both the Communication Technician and the Expert Prescriber roles were skewed much further toward the low end than the other two roles. This indicates that if a technical communicator were to be encroaching on traditional

public relations, he/she would be more likely to be encroaching as a Communication Facilitator or a Problem-Solving Process Facilitator.

To determine where the significance fell, one-way t-tests were performed comparing the four roles against one another. Results of these tests are exhibited in Table 8.

Table 8: One-way T-test results for role encroachment

Role 1	Role 2	p-value
Expert Prescribers	Problem-Solving Process Facilitators	0.3937
Expert Prescribers	Communication Facilitators	0.0290
Expert Prescribers	Communication Technicians	0.9040
Problem-Solving Process Facilitators	Communication Facilitators	0.1768
Problem-Solving Process Facilitators	Communication Technicians	0.3307
Communication Facilitators	Communication Technicians	0.0215

The one-way t-tests further justified the frequency charts which indicated significant differences between the roles of Communication Facilitator and Expert Prescriber and the roles of Communication Technicians and Communication Facilitators. This strongly indicates that technical communicators are more likely to perceive they perform the roles of Communication Facilitators or Problem-Solving Process Facilitators rather than the other two roles. There were no significant differences between that of a Communication Facilitator and a Problem-Solving Process Facilitator.

Significant differences were also found between the role of Problem-Solving Process Facilitator and the Communication Technician and Expert Prescriber roles ($p < 0.05$ for each). This indicates that technical communicators are more likely to perceive they help determine and solve public relations problems within their organization. There were no significant differences between the Communication Technician and Expert Prescriber roles.

Overall, in response to RQ2, technical communicators appear to favor the roles of Problem-Solving Process Facilitator and Communication Facilitator, if they perceive they play any role at all. In other words, role encroachment, at least at a small level, has been found to occur in the roles of Problem-Solving Process Facilitator and Communication Facilitator.

Experience Effects on Encroachment

The third research question examines the potential effects that a technical communicator's experience, or years on the job, has on encroachment of public relations. The respondents for this survey skewed toward ten years of experience or less. To determine if experience had a significant impact on encroachment, a one-way ANOVA was performed utilizing overall encroachment scores as the dependent variable and years spent working in technical communication as the independent variable. Results from the ANOVA are shown in Table 9.

Table 9: The p-values from the one-way ANOVA for experience effects

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4332.694	4	1083.174	3.472	0.021
Within Groups	8423.181	27	311.970		
Total	12755.875	31			

The significant findings indicate that experience is a factor on encroachment. Respondents who were on the job for five years or less averaged an overall encroachment score of 65.43 (out of 110), while those who have been working for six or more years scored an average of 43.84. Therefore, technical communicators who have been on the job for fewer years perceived they were taking on more public relations roles. This means that overall

encroachment is affected by a technical communicators' experience, or the number of years he/she has been working in the field of technical communication.

Gender Effects on Encroachment

To test whether gender has any perceived effect on the encroachment of public relations, an independent samples t-test was performed. The test showed no significant results ($p=0.57$) which indicates that gender does not play a role in the determination of encroachment. Men and women who responded to this survey are just as likely (or unlikely) to perceive they play public relations roles within their organizations.

Education Effects on Encroachment

Finally, a one-way ANOVA was conducted to determine if a technical communicator's degree had any significant effect on his/her propensity to encroach on public relations. That test resulted in no significant findings ($p=0.658$) meaning degree is not a factor when determining encroachment on public relations for the survey participants.

CHAPTER 5. CONCLUSIONS

This study was designed to determine the perceived level of technical communicators' encroachment on public relations. Ultimately, the results of this survey did not verify research (e.g, Troester & Warburton, 2001) indicating that technical communicators are assuming roles previously held by public relations specialists within organizations. Buchholz (1989) had stated that public relations was one of two careers that technical communicators would be most adept at performing. However, the findings of the present study indicate that technical communicators in the Des Moines market do not perceive themselves as public relations specialists or even performing typical public relations roles.

While there may be a small amount of overall encroachment occurring in this market, technical communicators are likely to perceive they assume only certain roles, namely Problem-Solving Process Facilitator and Communication Facilitator. In these roles, technical communicators may be determining and solving problems and issues their organizations encounter. Additionally, technical communicators may be working to ensure all parties (i.e. the public) understand the information distributed by their organization.

The survey found that technical communicators in this market do not perceive themselves playing the roles of Expert Prescriber or Communication Technician. That means that, at least in their opinion, the technical communicators who responded are not making decisions and prescribing solutions for public relations programs. Additionally, they do not perceive themselves utilizing their writing, graphics, photography, and other skills to sustain or advance their organization's public relations program.

Survey results also indicate that technical communication encroachment may be just beginning, as significant differences were found between less-experienced and more-experienced technical communicators. Those who had been in the field for less time were more likely to experience overall encroachment, which may be the result of new curriculum requirements, a willingness to assume new roles, and a desire to remain with an organization.

Technical communication programs continue to change, adding new requirements, new courses, and new experiences for students. Many of these changes have come from recommendations from the field. As curriculum changes occur within programs, students are entering the workplace with broader experiences and abilities. Some of these skills, such as problem solving and writing technical information for public audiences, may allow technical communicators to cross the boundary and perform some public relations roles. Therefore, technical communication programs may not only be succeeding in training technical communicators, but also be offering a broad education that allows technical communicators to transfer their knowledge and potentially encroach on the field of public relations.

At the level of this survey, gender and education did not factor into overall or role encroachment. However, if technical communication encroachment is just beginning to occur, there may become a distinction between which gender is more likely to encroach on public relations. One possible explanation is that as the field of public relations boasts more women than men in the profession, more women in technical communication may also begin playing public relations roles. However, without significant findings, this is impossible to assert at this time.

Implications for Education

The move toward technical communicators encroaching on public relations within organizations brings up the topic of curricular changes within technical communication programs. Successful programs strive to prepare their students for the ever-changing workplace. While researchers (Breuch et. al, 2001; Zachry et. al, 2001) are pushing for inclusion of topics such as usability, graphic design, and product design, the findings from this study suggest that inclusion of basic problem-solving skills and translation of technical information may also be important aspects to include in a technical communication education.

Troester and Warburton (2001) insist that technical communicators need to learn new communication principles to act or assist with public relations duties such as acting as the corporate spokesperson. Little (1990) offers a broader recommendation: a technical communicator “must act as the specialist in the chain of information development and transfer” (p. 30). This study found that technical communicators are beginning to perceive they are performing two public relations roles within their organizations: Communication Technician and Problem-Solving Process Facilitator.

To fully recommend curricular changes based on this survey and the results regarding encroachment on public relations would be short-sighted due to limitations of the survey. Therefore, it is reasonable to revisit what Whiteside (2003) recommended in her study of technical communication programs. She believes that “particular attention should be given to business operations, project management, problem-solving skills, and scientific knowledge” (p. 314). This is particularly important because the role of Communication Facilitator requires scientific knowledge and understanding of business operations in order to

successfully interpret technical jargon and translate it into information the public can understand. Additionally, when playing the role of a Problem-Solving Process Facilitator, a technical communicator must understand problem-solving. Therefore, the results of this study support Whiteside's notions that technical communication curricula must undergo some changes to fully prepare students to enter the workplace.

It is particularly interesting that survey participants do not perceive themselves playing the Communication Technician role within their organizations. This role truly focuses on an area where one would expect the most conceptual overlap between the two fields: writing, taking photographs, maintaining contacts, and producing documents. These are all tasks that have been attributed to technical communication in the past. In fact, Jones (1995), states that "in addition to working with text, page layout, and graphics, many technical communicators also work with video and audio" (p. 2). Through this small study, technical communicators responded they did not perceive they were doing any of the tasks associated with this role. Therefore, while technical communicators may have the baseline skills needed to perform tasks within this role, education programs need not focus on expanding those skills to incorporate additional public relations aspects.

The role of Expert Prescriber is not one that technical communicators in this study perceive they are playing within organizations. The duties associated with this role, primarily making decisions regarding problems, have not been widely researched and discussed in technical communication. Therefore, we can assume that this topic has not yet become an important aspect of technical communication.

Overall, this study indicates there may be some encroachment occurring in public relations by technical communicators, but likely only in certain roles. This finding holds

some relevance to technical communication educators who are striving to best prepare their students for the workplace. Specific roles must be investigated to determine what curriculum changes should be made if technical communicators are to be trained in skills that will allow them to encroach on public relations. Additionally, the only significant predictor of the encroachment found through this study is a technical communicator's experience level. No other predictors resulted in significant findings.

Limitations

A major limitation of this study is the low number of respondents. While the original survey population was 66, only 32 of those invited responded. Therefore, predicting large scale results from this study is impossible. Additionally, the respondents are all participants (presumably active) of the local technical communication professional organization. Those who responded may belong to the group because they perceive their role within the organization as that of a technical communicator. Communicators who perceive they act in public relations roles more often than technical communication roles may belong to another organization or no organization at all. Also, there is likely a large number of technical communicators in the surveyed area who do not belong to the organization and therefore were not invited to participate.

An additional limitation of this study is the survey itself. It is a one-time view of a technical communicator's perception of his/her role in the organization. Without significant follow-up to the survey, it is impossible to know if the technical communicator truly does or does not play a public relations role in his/her organization.

The final limitation of the study conducted is the age and accuracy of the survey used. This survey was originally developed at least 20 years ago. Tasks associated with both public

relations and technical communication have evolved and changed during that time. New technologies, research, theories, and capabilities have forced both fields to change and practitioners are now expected to understand and complete new tasks within their fields. Therefore, the survey leaves out tasks that may blur the lines between technical communication and public relations even further.

Further Research & Phenomena

The findings of this study, while limited, can and should be expanded into further research. While this was a small study by comparison, the findings indicate the field of technical communication may be encroaching on public relations, and therefore, changing in ways we have not seen before.

In practical terms, future studies that build upon the baseline research presented here, should involve a much larger and diverse sample set. Studies should not only include similar surveys, but also expand and utilize work-place studies and in-depth interviewing techniques. These advanced and more complete studies should be conducted regionally and nationally. Research such as Buchholz's (1989) study of the Boston area, have proved that intense examination of one region can lead to important and valid findings of professions. In fact, his study determined that technical communication is a rapidly growing and immensely diverse field which requires more research and investigation. His study was one of the first to determine that technical communication and public relations may be more closely linked than previously believed. A similar study utilizing the public relations role framework will provide more intense data that can be used to better predict the tasks required which will lead to better understanding of the field of technical communication.

When building upon the research presented here, special attention should be given to the areas discussed in this thesis: education, experience, and gender. Little and McLaren (1987), report that technical communicators value their education. To expand on that, future studies of potential encroachment on public relations should examine whether technical communicators' education is truly preparing them for public relations roles they may be playing within organizations. Research on potential encroachment and a technical communicator's experience level can further expand the education discussion. In-depth research may overturn the true reason why more experienced technical communicators are less likely to take on public relations roles within their organizations, as found in this study.

Expanding on the body of knowledge about what technical communicators do within their organizations may help educators determine curriculum changes that will better prepare their students for the changing workplace. In fact, Whiteside (2001) states that technical communication research must focus on the industry if we are to "ease technical communicators' transition to business and industry" (p. 316). By utilizing and expanding on the public relations role theory discussed in this thesis, researchers and educators can better understand the role that public relations knowledge and skills may play in a technical communicator's professional life. Curriculum changes can then reflect the new skills and knowledge that technical communicators will need if they are expected to take on public relations roles within organizations.

Continuing to study potential encroachment on public relations will also help professionals in technical communication redefine the field. Jones (1995) states that technical communicators are "experts at what they do, and this expertise can and must be defined" (p. 3). By investigating the public relations roles that technical communicators are possibly

playing within organizations, we can better define the expertise, as well as the field of technical communication. A strong definition of the field is essential if technical communication is going to continue to grow as a profession and a field of study and research.

WORKS CITED

- Allcountyjobs.com LLC, (n.d.). Job description: technical writer. Retrieved Feb. 19, 2005, from New Haven County Jobs Web site:
<http://www.newhavencountyjobs.com/jobdescr.asp?jobcode=2546>.
- Breuch, L.M., Zachry, M., Spinuzzi, C. (2001). Usability Instruction in Technical Communication Programs: New Directions in Curriculum Development. *Journal of Business and Technical Communication*, 15(2), 223-240.
- Broom, G.M. (1982). A Comparison of Sex Roles in Public Relations. *Public Relations Review*, 8(3), 17-22.
- Broom, G.M. & Dozier, D.M. (1986). Advancement for public relations role models. *Public Relations Review*, 12(1), 37-56.
- Broom, G.M. & Dozier, D.M. (1993). Evolution of the Managerial Role in Public Relations Practice. Presentation given at the meeting of the Public Relations Division, Association for Education in Journalism and Mass Communication, Kansas City, MO.
- Broom, G.M. & Smith, G.D. (1979). Testing the Practitioner's Impact on Clients. *Public Relations Review*, 5(3), 47-59.
- Bowdon, M. (2004). Technical Communication and the Role of the Public Intellectual: A Community HIV-Prevention Case Study. *Technical Communication Quarterly*, 13(3), 325-340.
- Buchholz, W.J. (1989). The Boston Study: Analysis of a Major Metropolitan Business and Technical-Communication Market. *Journal of Business and Technical Communication*, 3(1), 5-35.
- Burnett, R.E. (2001). *Technical Communication*. 5th ed. Boston: Thomson Heinle.
- Cutlip, S.M. & Center, A.H. (1952). *Effective Public Relations*. 4th Ed. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Ekachai, D.G. (1995). Applying Broom's Role Scales to Thai Public Relations Practitioners. *Public Relations Review*, 21(4), 325-336.
- Ewan, S. (1996). *PR! A Social History of Spin*. New York: BasicBooks.
- Gibson, D.C. (1991). The Communication Continuum: A Theory of Public Relations. *Public Relations Review*, 17(2), 175-183.

- Greiling, D. (2001). Writing technical press releases. *Intercom*, 24-26.
- Grice, R. (1996). Professional Roles: Technical Writer. In K. Staples, and Ornatowski, C. (Eds.), *Foundations for Teaching Technical Communication* (pp. 209-220). Greenwich, CT: Ablex.
- Grunig, J.E. (2000). Collectivism, Collaboration, and Societal Corporatism as Core Professional Values in Public Relations. *Journal of Public Relations Research*, 12(1), 23-48.
- Hutton, J.G. (1999). The Definition, Dimensions, and Domain of Public Relations. *Public Relations Review* 25(2), 199-214.
- Jones, D. (1995). A Question of Identity. *Technical Communication*, 42(4), 567-569.
- Kelly, K.S. (1993) Public Relations and Fund-raising Encroachment: Losing Control in the Non-Profit Sector. *Journal of Public Relations Research* 19(4), 349-365.
- Kelly, K.S. (1994). Fund-Raising Encroachment and the Potential of Public Relations Departments in the Nonprofit Sector. *Journal of Public Relations Research*, 6(1), 1-22.
- Kynell, T. (1999). Technical Communication from 1850-1950: Where Have We Been?. *Technical Communication Quarterly*, 8(2), 143-151.
- Lauzen, M.M. (1991). Imperialism and Encroachment in Public Relations. *Public Relations Review*, 17(1), 245-255.
- Lauzen, M.M. (1992). Public Relations Roles, Intraorganizational Power, and Encroachment. *Journal of Public Relations Research*, 4(2), 61-80.
- Lauzen, M.M. & Dozier, D.M. (1992). The Missing Link: The Public Relations Manager Role as Mediator of Organizational Environments and Power Consequences for the Function. *Journal of Public Relations Research*, 4(4), 205-220.
- Lee, J., Jares, S.M., & Heath, R.L. (2000). Decision-Making Encroachment and Cooperative Relationships Between Public Relations and Legal Counselors in the Management of Organizational Crisis. *Journal of Public Relations Research*, 11(3), 243-270.
- Little, S.B. (1990). Preparing the Technical Communicator of the Future. *IEEE Transactions on Professional Communication*, 33(1), 28-31.
- Little, S.B. and McLaren, M.C. (1987). Profile of Technical Writers in San Diego County: Results of a Pilot Study. *Journal of Technical Writing and Communication*, 17(1), 9-23.

- Miller, C. (1989). What's Practical about Technical Writing?. In B.E. Fearing and Sparrow, W.K. (Eds.), *Technical Writing: Theory and Practice*, (pp. 14-24). New York, NY: MLA.
- The Public Relations Profession (n.d.). Careers in Public Relations: An Overview. Retrieved Feb. 10, 2006, from Public Relations Society of America Web site:
http://www.prsa.org/_Resources/profession/careeroverview.asp?ident=prof2.
- Sides, C.H. (1992). Should you Know How to do Marketing, Advertising, and Public Relations Writing?. *Technical Communication*, 39(3), 367-376.
- Staples, K. (1999). Technical Communication from 1950-1998: Where Are We Now?. *Technical Communication Quarterly*, 8(2), 153-164.
- Troester, R. and Warburton, W. (2001). The Technical Communicator as Corporate Spokesperson: A Public Relations Primer. *Journal of Technical Writing and Communication* 31(3), 241-256.
- Whiteside, A. (2003). The Skills that Technical Communicators Need: An Investigation of Technical Communication Graduates, Managers, and Curricula. *Journal of Technical Writing and Communication*, 33(4), 303-318.
- Zachry, M., Cook, K.C., Faber, B.D., and Clark, D. (2001). The Changing Face of Technical Communication: New Directions for the Field in the New Millenium. *Proceedings of the 19th Annual International Conference on Computer Documentation* (pp. 248-260). Santa Fe, NM: ACM Press.